Application No.: 10/593,034

Amendment dated: September 1, 2011

## AMENDMENTS TO THE CLAIMS

The following Listing of the Claims will replace all preceding listing of claims in the application.

## Listing of the Claims:

Claim 1. (Currently Amended): A 3-[3-(benzoylamido)benzyloxy]aspartic acid having a radioactive substituent on the benzoyl group which is represented by the following formula (1), or an ester or salt thereof:

wherein X represents a substituent containing a radioactive atom(s) which is selected from a straight or branched lower-aliphatic alkyl group, a hydroxyl group, a straight or branched lower aliphatic alkoxy group, an amino group, a straight or branched lower aliphatic acylamido group, a halogen atom and a straight or branched lower aliphatic haloalkyl group is 125 I or a tritiumcontaining ethyl group (X=C<sub>2</sub>H<sub>3</sub>T<sub>2</sub>); and R<sup>1</sup> and R<sup>2</sup> each represents a hydrogen atom, a straight or branched lower aliphatic alkyl group or an acetoxymethyl group.

Claim 2. (Canceled).

Claim 3. (Original): A precursor compound of a compound as claimed in claim 1 represented by the following formula (2):

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NHBoc 
$$R^2O_2C$$
  $CO_2R^1$ 

wherein R<sup>1</sup> and R<sup>2</sup> each represents a hydrogen atom, a straight or branched lower aliphatic alkyl group or an acetoxymethyl group; Y represents a leaving group to undergo a substitution reaction which is selected from an organometallic group, a halogen atom, a diazo group, a diazonium group, a trialkylammonium group and a nitro group; and Boc represents a t-butoxycarbonyl group.

Claim 4. (Previously Presented): The precursor compound as claimed in claim 3, wherein Y is -Sn(n-Bu)<sub>3</sub>.

Claim 5. (Previously Presented): A method for producing a compound as claimed in claim 1 which comprises subjecting a precursor compound of formula (2)

NHBoc 
$$R^2O_2C$$
  $CO_2R^1$ 

wherein R<sup>1</sup> and R<sup>2</sup> each represents a hydrogen atom, a straight or branched lower aliphatic alkyl group or an acetoxymethyl group; Y represents a leaving group to undergo a substitution reaction which is selected from an organometallic group, a halogen atom, a diazo group, a diazonium group, a trialkylammonium group and a nitro group; and Boc represents a t-butoxycarbonyl group, to an exchange reaction with a radioactive atom and then removing the protecting group to give a compound of the formula (2).

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Claim 6. (Previously Presented): The method as claimed in claim 5 which comprises subjecting the precursor compound of formula (2) wherein Y is  $-Sn(n-Bu)_3$  to an oxidative tiniodine exchange reaction with  $Na^{125}I$  in the presence of an oxidizing agent and acetic acid to thereby give a compound of formula (1) wherein X is  $^{125}I$ .

- Claim 7. (Original): A radiolabeled inhibitor of glutamate transporter activity comprising a compound as claimed in claim 1.
- Claim 8. (Original): A radioactive ligand to a glutamate transporter comprising a compound as claimed in claim 1.
- Claim 9. (Previously Presented): A method for examining distribution and/or expression of glutamate transporter and/or glutamate uptake level in a biological sample which comprises:
- a) contacting the biological sample with a compound as claimed in claim 1, an inhibitor as claimed in claim 7 or a ligand as claimed in claim 8;
- b) detecting the presence or absence of the compound, the inhibitor or the ligand having bound specifically to the biological sample with the use of the radioactivity as an indicator; and
- c) in the case where the specific binding is observed in the above step b), estimating that the glutamate transporter is distributed or expressed in the biological sample or that the part of the body from which the biological sample was obtained participates in glutamate uptake.
- Claim 10. (Original): A compound as claimed in claim 1 wherein, in the formula (1), X is a tritium-containing ethyl group ( $X=C_2H_3T_2$ ), and each of  $R^1$  and  $R^2$  is a hydrogen atom.
- Claim 11. (Currently Amended): A precursor compound of a compound of the formula (1) as claimed in claim 10 which is represented by the following formula (3):

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$$HO_2C$$
 $CO_2H$ 
 $R^3$ 
 $H$ 
 $(3)$ 

wherein R<sup>3</sup> represents a straight or branched lower unsaturated aliphatic alkenyl is a vinyl group.

Claim 12. (Canceled).

Claim 13. (Original): A method for producing a compound of the formula (1) as claimed in claim 10 which comprises reacting a precursor compound of the formula (3) with tritium gas in the presence of a palladium catalyst.

Claim 14. (Canceled).